



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

July 17, 2007

MEMORANDUM

SUBJECT: Effects Determinations for Imazapyr Relative to the California Red-Legged Frog and Designated Critical Habitat

FROM: Anita Pease, Biologist *APease*  
ERB 3  
Environmental Fate and Effects Division

TO: Arthur-Jean B. Williams, Associate Director  
Environmental Fate and Effects Division

Attached is the assessment of potential direct and indirect effects to the California red-legged frog (CRLF) and potential adverse modification to designated critical habitat from uses of the herbicide, imazapyr. While the Endangered Species Act requires we assess uses of pesticides relative to any potentially affected listed species, this assessment focuses only on the CRLF, including designated critical habitat, addressing provisions of a settlement agreement entered into by the federal government to resolve claims made by plaintiffs against EPA in a court case (CBD v. EPA<sup>1</sup>).

The attached assessment was conducted consistent with the Agency's Overview Document<sup>2</sup>. Effects determinations for this assessment are summarized below:

- Imazapyr may affect and is likely to adversely affect (LAA) the CRLF via indirect effects on habitat and/or primary productivity (i.e., ecosystem structure and function for both the aquatic plant community and riparian vegetation). Critical habitat may also be modified, based on direct effects to aquatic vascular plants and terrestrial plants.
- The effects determination for direct effects to the CRLF and indirect effects via reduction in food sources is no effect (NE).
- Tables 1.1 and 1.2 of the executive summary provide further detail on the effects determinations for imazapyr.

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<sup>1</sup> Settlement agreement of October 20, 2006: Center for Biological Diversity v. United States Environmental Protection Agency. Civ. No: 02-1580-JSW(JL).

<sup>2</sup> Overview of the Ecological Risk Assessment: Process in the Office of Pesticide Programs, U.S. Environmental Protection Agency: Endangered and Threatened Species Effects Determinations: January 23, 2004.

As required by the Alternative Consultation Agreement EPA entered into with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (Services), I have been trained by the Services to make such determinations. Additionally, this assessment was subjected to internal Agency peer review throughout its development. The review panel included three other scientists who have been trained by the Services to make such determinations (Shannon Borges, Dr. Edward Odenkirchen and Megan Thyne).

Please let me know if you have any questions regarding this assessment and effects determination for imazapyr relative to the CRLF and its designated critical habitat.

cc: Steven Bradbury  
Peter Caulkins

Attachments